

Top 20 Chemicals with Largest TRI On-site and Off-site Disposal or Other Releases, 2002: Primary Metals (SIC 33)

CAS Number Chemical	On-site Disposal or Other Releases														Total On-site Disposal or Other Releases Pounds	Total Off-site Disposal or Other Releases Pounds	Total On-site and Off-site Disposal or Other Releases Pounds
	On-site Disposal to Class I Underground Injection				Other On-site Disposal or Other Releases												
	RCRA				Fugitive Air Emissions Pounds	Point Source Air Emissions Pounds	Surface Water Discharges Pounds	Class II-V Wells Pounds	Land Treatment Pounds	Surface Impoundment Pounds	Other Land Disposal Pounds	Subtotal Pounds					
	Subtitle C Landfills Pounds	Other On- site Landfills Pounds	Subtotal Pounds	Other Releases Pounds													
-- Zinc compounds	1,205	563,674	13,903,046	14,467,925	1,183,529	1,610,827	143,010	130,000	5	5,779,122	32,234,287	41,080,781	55,548,706	167,583,194	223,131,900		
-- Copper compounds	111,843	5,681	726,395	843,919	117,999	212,412	16,697	650,000	5	12,033,417	187,890,700	200,921,230	201,765,149	4,367,284	206,132,433		
-- Manganese compounds	4,300	201,061	10,508,144	10,713,505	559,000	385,383	271,265	1,300,000	5	3,932,197	61,255,340	67,703,189	78,416,694	28,820,682	107,237,376		
-- Nitrate compounds	0	0	0	0	682	1,953	39,113,744	0	0	1,212,000	7,816	40,336,195	40,336,195	259,590	40,595,786		
-- Lead compounds	2,213	121,947	1,428,698	1,552,858	135,961	299,054	12,127	88	230	3,857,574	8,587,662	12,892,697	14,445,555	11,627,320	26,072,875		
7429-90-5 Aluminum (fume or dust)	5	0	5,675,804	5,675,809	162,171	799,475	11,459	0	0	0	3,852,844	4,825,949	10,501,758	6,161,156	16,662,914		
7782-50-5 Chlorine	0	0	0	0	158,604	13,874,237	3,909	0	0	0	305	14,037,055	14,037,055	206	14,037,261		
7440-66-6 Zinc (fume or dust)	0	0	1,776	1,776	138,289	240,554	4,785	0	0	0	250	383,878	385,654	11,202,382	11,588,036		
-- Chromium compounds	4,300	608,860	1,866,008	2,479,168	30,114	95,043	58,677	0	135	599,353	1,151,076	1,934,398	4,413,566	6,000,161	10,413,726		
-- Nickel compounds	39,085	78,790	430,900	548,775	15,893	56,748	15,706	100,000	5	1,069,521	6,001,606	7,259,478	7,808,253	2,382,254	10,190,507		
7439-92-1 Lead	0	254,715	5,596,173	5,850,888	34,680	76,641	5,510	0	917	153	611	118,511	5,969,400	1,833,698	7,803,098		
-- Arsenic compounds	71,047	6,661	25,227	102,935	8,593	16,758	1,569	2,700	0	2,800,250	3,706,574	6,536,444	6,639,379	145,629	6,785,008		
7647-01-0 Hydrochloric acid	0	0	0	0	578,556	6,156,904	125	0	0	0	0	6,735,585	6,735,585	16,364	6,751,949		
7439-96-5 Manganese	0	5	2,185,261	2,185,266	140,113	163,830	40,443	0	2,562	250	200	347,398	2,532,664	4,191,286	6,723,949		
7664-41-7 Ammonia	370,000	0	0	370,000	2,582,543	2,256,353	311,749	0	0	455,000	3,700	5,609,345	5,979,345	39,520	6,018,865		
7664-39-3 Hydrogen fluoride	0	0	0	0	1,975,539	1,150,811	10,271	0	0	1,785,822	0	4,922,443	4,922,443	34,457	4,956,900		
463-58-1 Carbonyl sulfide	0	0	0	0	115,547	4,367,376	0	0	0	0	0	4,482,923	4,482,923	0	4,482,923		
7440-50-8 Copper	10	305,274	172,091	477,375	137,143	194,724	11,731	0	250	1,918	492	346,257	823,632	1,999,685	2,823,317		
7632-00-0 Sodium nitrite	0	0	0	0	1,977	18,509	1,887,352	0	0	0	0	1,907,838	1,907,838	60,560	1,968,398		
-- Vanadium compounds	0	0	241,522	241,522	3,055	22,100	174,761	0	0	1,289,500	0	1,489,416	1,730,938	157,169	1,888,108		

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at [www.epa.gov/tri/tridata/index.htm#pdr](http://www.epa.gov/tri/tridata/index.htm#pdr).

On-site Disposal or Other Releases include Underground Injection to Class I Wells (Section 5.4.1), RCRA Subtitle C Landfills (5.5.1A), Other Landfills (5.5.1B), Fugitive or Non-point Air Emissions (5.1), Stack or Point Air Emissions (5.2), Surface Water Discharges (5.3), Class II-V Wells (5.4.2), Land Treatment (5.5.2), Surface Impoundments (5.5.3) and Other Land Disposal (5.5.4). Off-site Disposal or Other Releases include from Section 6.2 Underground Injection (M71), RCRA Subtitle C Landfills (M65), Other Landfills (M64, M72), Storage Only (M10), Solidification/Stabilization - Metals and Metal Category Compounds only (M41 or M40), Wastewater Treatment (excluding POTWs) - Metals and Metal Category Compounds only (M62 or M61), Surface Impoundments (M63), Land Treatment (M73), Other Land Disposal (M79), Other Off-site Management (M90), Transfers to Waste Broker - Disposal (M94, M91), and Unknown (M99) and, from Section 6.1 Transfers to POTWs (metals and metal category compounds only).

Does not include Off-site Disposal or Other Releases transferred to other TRI facilities that reported the amounts as on-site disposal or other releases.

Facilities/forms are included in the manufacturing industry categories (SIC Codes 20-39) if they did not report a SIC code in the other industries. Forms that reported more than one 2-digit SIC code within the range 20 to 39 are assigned to the "multiple codes" category. Facilities/forms are included in the other industry categories if the facility/form has a SIC code in the other industries and no SIC code in 20-39. If the facility reported in any year prior to 1998 and the facility/form has a combination of manufacturing and other industry SIC codes, then the facility/form is included in the manufacturing industry category. If the facility reported for the first time in 1998 or later and the facility/form has a combination of manufacturing and other industry SIC codes, then the facility/form is included in the other industry category. Forms with no 2-digit SIC code are included in the "no codes" category. One facility, Phelps Dodge Miami of Claypool, AZ, that reported under SIC code 33 and SIC code 10 in 2002 and previous years have been included in SIC code 10 for the purpose of this analysis.